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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,434	01/12/2004	Huai-Ter Victor Chong	200315442-1	2176
22879	7590	03/15/2006		
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
			EXAMINER AUVE, GLENN ALLEN	
			ART UNIT 2111	PAPER NUMBER

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/756,434

Applicant(s)

CHONG ET AL.

Examiner

Glenn A. Auve

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 7-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 7-18 are objected to because of the following informalities: in claim 7, line 5, "a" should be "an". In claim 16, line 7, "a cells" is not grammatically correct. In claim 18, line 1, "media" should be "medium". Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim is directed to a computer readable media [sic] comprising computer readable code for instructing a computer to process an interrupt. There does not appear to be any description of this aspect of the claimed invention in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 is rejected because it is not exactly clear what "comprising" refers to on line 8. What is it that comprises the listed elements? Claim 18 is also rejected based on lack of positive antecedent basis of "the interrupt set" on lines 11 and 13.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1,6, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Dickey, U.S. Pat. No. 6,959,352 B1.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Dickey shows a method for processing an interrupt transaction in a system having a plurality of processors arranged into at least two partitions (fig.1), the method comprising: a. receiving an interrupt message (fig.5); b. decoding the interrupt message to identify an interrupt source (inherent, also see col.4, lines 26-61); c. determining whether the interrupt source is in an interrupt set (fig.5,(86)); d. dropping the interrupt if the interrupt source

is not in the interrupt set (88); e. determining whether the interrupt source is in a local partition and delivering the interrupt if the interrupt source is in the local partition (78); and f. processing the interrupt message in accordance with at least one of a target enable register and a vector enable register if the interrupt source is in the interrupt set and not in the local partition (col.5). Dickey shows all of the steps recited in claim 1.

As for claim 6, the argument for claim 1 applies. Dickey also shows segregating the interrupt message into a header portion and a data portion; decoding an interrupt source identifier from the header portion in a first processor; and decoding an interrupt vector from the data portion in a second processor (fig.4 and col.4). Dickey shows all of the steps recited in claim 6.

As per claim 18, Dickey shows a computer readable media comprising computer readable code for instructing a computer to process an interrupt comprising: a. receiving an interrupt message identifying an interrupt source, an interrupt target, and an interrupt vector (fig.4 and col.4); b. dropping the interrupt if the interrupt source is not identified in the interrupt set as an element from which interrupts may be accepted (88); c. dropping the interrupt if the interrupt source is identified in the interrupt set as an element from which interrupts may be accepted, the interrupt source is not in the same partition as the interface module, and the interrupt target is not identified as an element enabled to process interrupts (76); and d. transmitting the interrupt to the interrupt target if interrupt source is not dropped in one of steps (b) and (c) (cols. 4-5). Dickey shows all of the elements recited in claim 18.

***Allowable Subject Matter***

8. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 19 is allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not show the vector enable and target enable limitations in combination with the other limitations in the claims, as recited in claims 19,16,7,4, and 2.

11. With regard to claim 5, the prior art does not show determining a number of interrupts having a characteristic received from the interrupt source and removing the interrupt source from the interrupt set in response to the number of interrupts in combination with the limitations of claim 1.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other cited references show partitioned systems and handling interrupts.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (571) 272-3623. The examiner can normally be reached on M-F 8:00 AM-5:30 PM, every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn A. Auve  
Primary Examiner  
Art Unit 2111

gaa  
8 March 2006